

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	10/840,028
Filing Date	05/05/2004
First Named Inventor	Ravenscroft, Keith N
Art Unit	1742
Examiner Name	Zheng, Lois L.
Attorney Docket Number	88369-CON

U. S. PATENT DOCUMENTS

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
156	A	US- 2,148,331	02/21/1939	Weisberg et al.	
	B	US- 2,774,696	12/18/1956	Gibson, Robert C.	
	C	US- 2,791,525	05/07/1957	Rausch et al.	
	D	US- 2,805,969	09/10/1957	Goodspeed et al.	
	E	US- 2,817,610	12/24/1957	Newell et al.	
	F	US- 2,835,616	05/20/1958	Rausch et al.	
	G	US- 2,850,417	09/02/1958	Jenkins et al.	
	H	US- 2,960,420	11/15/1960	Mitchell, Abraham J.	
	I	US- 3,053,691	09/11/1962	Hartman et al.	
	J	US- 3,053,692	09/11/1962	Pocock, Walter E.	
	K	US- 3,083,149	03/26/1963	Cranston, Hoy A.	
	L	US- 3,121,033	02/11/1964	Stapleton, John M.	
	M	US- 3,346,522	10/10/1967	Schuster et al.	
	N	US- 3,481,762	12/02/1969	Streicher, Michael A	
	O	US- 3,559,280	02/02/1971	Mailhiot et al.	
	P	US- 3,598,659	08/10/1971	Klingler et al.	
	Q	US- 3,632,452	01/04/1972	Matsushima et al.	
	R	US- 3,649,371	03/14/1972	Tongyai, Shingkata	
	S	US- 3,658,603	04/25/1972	Boyer, Charles D.	

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

Is L By

Date	
Considered	

8/21/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet **2**of **6****Complete if Known**

Application Number	10/840,028
Filing Date	05/05/2004
First Named Inventor	Ravenscroft, Keith N
Art Unit	1742
Examiner Name	Zheng, Lois L.
Attorney Docket Number	88369-CON

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
llj	T	US- 3,677,827	07/18/1972	Weaver et al.	
	U	US- 3,706,604	12/19/1972	Plaxton, Elmer H.	
	V	US- 3,709,742	01/09/1973	Jacobs, John J.	
	X	US- 3,753,942	08/21/1973	Moran, et al.	
	Y	US- 3,806,375	04/23/1974	McLeod et al.	
	Z	US- 3,879,237	04/22/1975	Faigen et al.	
	aa	US- 3,899,367	08/12/1975	Mitchell, Abraham J.	
	ab	US- 3,929,514	12/30/1975	Houlihan et al.	
	ac	US- 3,936,445	02/03/1976	Pfizer et al.	
	ad	US- 4,006,041	02/01/1977	Fabregas et al.	
	ae	US- 4,017,335	04/12/1977	Maloney, James E.	
	af	US- 4,018,934	04/19/1977	Parliment, Thomas H	
	ag	US- 4,086,182	04/25/1978	Hengelhaupt et al.	
	ah	US- 4,140,551	02/20/1979	Jones; William C.	
	ai	US- 4,246,030	01/20/1981	Lipinski; Richard J.	
	aj	US- 4,296,182	10/20/1981	Matsubayashi et al.	
	ak	US- 4,298,405	11/03/1981	Saus et al.	
	al	US- 4,565,585	01/21/1986	Matsuda; Shigeki	
	am	US- 4,591,397	05/27/1986	Jones et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

8/21/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/840,028
Filing Date	05/05/2004
First Named Inventor	Ravenscroft, Keith N
Art Unit	1742
Examiner Name	Zheng, Lois L.
Attorney Docket Number	88369-CON

Sheet 3 of 10**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	an	US- 4,728,365	03/01/1988	Jarvi; Paul	
	ao	US- 4,781,948	11/01/1988	Caldwell; David	
	ap	US- 4,789,409	12/06/1988	Jarvi; Paul R.	
	aq	US- 4,794,139	12/27/1988	Braden et al.	
	ar	US- 4,806,161	02/21/1989	Fabiny et al.	
	as	US- 4,944,812	07/31/1990	Lindert et al.	
	at	US- 5,089,349	02/18/1992	Kaiser; Herbert J.	
	au	US- 5,104,463	04/14/1992	Menke; Joseph T.	
	av	US- 5,320,872	06/14/1994	McNeel et al.	
	aw	US- 5,466,297	11/14/1995	Goodman et al.	
	ax	US- 5,580,063	12/03/1996	Edwards; A. W.	
	ay	US- 5,591,275	01/07/1997	Miyafuji et al.	
	az	US- 5,601,663	02/11/1997	Rungta et al.	
	ba	US- 5,667,599	09/16/1997	Rungta et al.	
	bb	US- 5,704,995	01/09/1998	Bradley; Johnny L.	
	bc	US- 5,723,183	03/03/1998	Williams et al.	
	bd	US- 5,919,318	07/06/1999	Brands et al.	
	be	US- 6,171,409	01/09/2001	Hamacher et al.	
	bf	US- 6,193,815	02/27/2001	Wada et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

8/21/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	4	of	6
-------	---	----	---

Complete if Known

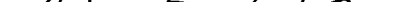
Application Number	10/840,028
Filing Date	05/05/2004
First Named Inventor	Ravenscroft, Keith N
Art Unit	1742
Examiner Name	Zheng, Lois L.
Attorney Docket Number	88369-CON

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
	bm	DE-4217098	11/26/1992	Uehara et al.	
	bn	DE-2623604	12/23/1976	Okabe, et al.	
	bo	EP-0264471	04/27/1988	Fabregas, et al	
	bp	EP-0264472	04/27/1988	Fabregas, et al	
	bq	JP-S62-186466	07/23/1987	Nakamura, et al	

Examiner Signature		Date Considered	8/24/05
-----------------------	---	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/840,028
Filing Date	05/05/2004
First Named Inventor	Ravenscroft, Keith N
Art Unit	1742
Examiner Name	Zheng, Lois L.
Attorney Docket Number	88369-CON

Sheet 5

of

6

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
lbf	br	BIRCHWOOD LABORATORIES, INC. "Safe, Low Cost, In-house Blackening with the Presto® Black Process," Birchwood Laboratories, Inc., Eden Prairie, MN; no date (6 pages).	
lbf	bs	BIRCHWOOD CASEY, "Guide to Room Temperature Antiquing without Hazardous Effluent"; Birchwood Casey; Eden Prairie, MN (no date).	
lbf	bt	BIRCHWOOD CASEY, In-House Blackening with No EPA Regulated Chemicals brochure; Birchwood Casey; Eden Prairie, MN (No Date).	
lbf	bu	BIRCHWOOD CASEY, "Your Practical Guide and Cost Analysis"; Birchwood Casey; Eden Prairie, MN; Aug. 1997.	
lbf	bv	COTTON, F. Albert and WILKINSON, Geoffrey, "Advanced Inorganic Chemistry A comprehensive Text", Interscience Publishers, NY, pp. 847-863, (1962, no month).	
lbf	bw	DANIELS, Christopher; "Black-Oxide Basics: Improved protection, appearance and performance with black oxide finishes", Products Finishing; July, 1992.	
lbf	bx	DU-LITE, "DULITE'S® Guide to Hot Black Oxide Processes", The Du-Lite Corporation; Middletown CT; 1994 (no month).	
lbf	by	GODDING, A. D.; "The Basics of Black Oxide Finishing: Why to do it, how to do it, applications and advantages", Products Finishing; February, 1990.	
lbf	bz	GODDING, A. D.; "Why Black Oxide? Here's how and why", Products Finishing; April, 1986.	
lbf	ca	HEATBATH Corporation, "It Doesn't Get Any Blacker than This" with supporting pages from www.heatbath.com/black-oxide-finishing.htm ; Finisher's Management et al, March 1996.	

Examiner Signature	<i>Li R. Zheng</i>	Date Considered	8/21/05
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/840,028
Filing Date	05/05/2004
First Named Inventor	Ravenscroft, Keith N
Art Unit	1742
Examiner Name	Zheng, Lois L.
Attorney Docket Number	88369-CON

Sheet 6

of

6

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
ls	cb	HUBBARD-HALL, "Activated Black Magic Plus: The cutting edge for quality and performance when hot black oxidizing steel;" Hubbard-Hall; Waterbury, CT (no date).	
ls	cd	HUBBARD-HALL, "Activated Black Magic Plus" http://www.hubbard-hall.com/files/2232001.pdf ; Hubbard-Hall, Waterbury, CT; 2003	
ls	ce	RUHLAND, Mark; "Blackening of Ferrous Metals;" Birchwood Casey and PF Directory; Eden Prairie, MN, (1999; no month).	
ls	cf	NATIONAL TOXICOLOGY PROGRAM; "Thiourea--CAS No. 62-56-6: First listed in the Third Annual Report on Carcinogens"; Tenth Report on Carcinogens; date unknown.	
ls	cg	RADIAN CORPORATION; "N,N'-Diethylthiourea", NTP Chemical Repository (Radian Corporation); Aug. 29, 1991.	
ls	ch	BIRCHWOOD CASEY, "Material Safety Data Sheet: Presto® Black Brush-On BST4 "; Birchwood Laboratories, Inc.; Eden Prairie, MN; April 2, 2001.	

Examiner
Signature

L. Zheng

Date
Considered

8/21/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.